

ABSTRACT

A method and system for preserving the integrity of a negotiation that includes providing an architecture which includes a center A, and a plurality of users B.sub.1, B.sub.2,..., B.sub.n. each user B.sub.i generates an input X.sub.i, which is input to the center A. The center A computes and publishes a function $F(X_{\text{sub.1}}, X_{\text{sub.2}}, \dots, X_{\text{sub.n}})$ based on the input messages it receives. Each user B.sub.i ($1 \leq i \leq n$) communicates with the center A, exclusively. Center A publishes additional information which lets each of the users verify that F was computed correctly, and prevents a coalition of any one subset of the users from learning anything which cannot be computed just from the output of the function, $F(X_{\text{sub.1}}, \dots, X_{\text{sub.n}})$, and from their own inputs, or information about the inputs of other users.